

CHIEF OF NAVAL OPERATIONS NAVIGATION PLAN

2022



CONTENT

- 
- | | |
|-------|--------------------------------------|
| P. 1 | WHY A NAVIGATION PLAN UPDATE? |
| P. 2 | INTRODUCTION |
| P. 4 | SECURITY ENVIRONMENT |
| P. 6 | OUR RESPONSE |
| P. 8 | FORCE DESIGN IMPERATIVES |
| P. 9 | FORCE DESIGN 2045 |
| P. 12 | NAVIGATION PLAN PRIORITIES |
| P. 13 | ACHIEVING NAVIGATION PLAN PRIORITIES |
| P. 16 | READINESS |
| P. 18 | CAPABILITIES |
| P. 20 | CAPACITY |
| P. 22 | SAILORS |
| P. 24 | CONCLUSION |

WHY A NAVIGATION PLAN UPDATE?

The CNO Navigation Plan (NAVPLAN), released in January 2021, focused the Navy's efforts across four foundational priorities: **Readiness, Capabilities, Capacity, and Sailors**. This update builds upon that foundation, leveraging our progress to further strengthen the United States Navy's warfighting advantage.

Three key developments led to this update:

First, the 2022 National Defense Strategy (NDS) clarified America's national security objectives, emphasizing the need to address long-term competition with China and sustain military advantage against Russia. It also introduced integrated deterrence as a unifying principle for the Department of Defense and supporting U.S. Government agencies.

Second, the development of the Joint Warfighting Concept aligned complementary capabilities and missions across all U.S. military services.

Third, through a rigorous campaign of learning, we recognized that the Navy needs a more continuous, iterative Force Design process to focus our modernization efforts and accelerate the capabilities we need to maintain our edge in this critical decade and beyond.

This Navigation Plan update drives a Fleet-wide movement to strengthen our learning culture and advances a framework to accelerate our warfighting advantage.

Our Navy team is the most capable in the world. However, we have identified unacceptable variability in our performance—the gap between our best and worst performers is too great. History shows that the navy which adapts, learns, and improves the fastest gains an enduring warfighting advantage. The essential element is fostering a healthy ecosystem—a *culture*—that assesses, corrects, and innovates better than the opposition. This is the essence of our **Get Real, Get Better** call to action, aimed at advancing a culture of excellence and accelerating our warfighting advantage in this critical decade.

Leveraging NAVPLAN 2021, the Navy built a framework for producing and sustaining our Readiness, Capabilities, Capacity, and Sailors. This is the Navigation Plan Implementation Framework (NIF) and its coordinated lines of effort.

Ultimately, we must deliver the most capable force possible to our Navy's Numbered Fleets. Together with the U.S. Marine Corps and Coast Guard, these Fleets deliver integrated all-domain naval power to the Joint Force in competition, crisis, and conflict. Our allies and partners recognize U.S. naval forces as their on-scene partner for building combined maritime strength.

Navigation Plan 2022 plots a sustainable course for the Navy as we continue implementing the Secretary of the Navy's Strategic Guidance and the Tri-Service Maritime Strategy to strengthen America's advantage at sea. This guidance supersedes last year's NAVPLAN and will inform annual guidance for the Navy's Program Objective Memorandum and other annual budget documents.

INTRODUCTION

America has always been a maritime nation. The seas are the lifeblood of our economy, our national security, and our way of life.

After World War II, America and its allies ushered in an era of great power peace and shared prosperity around the globe, establishing an international rules-based order. As a result, global trade fueled economic growth and raised standards of living across the nation. The benefits of this prosperity spread around the world: child mortality declined, life expectancy lengthened, poverty plummeted, and literacy skyrocketed.

This progress and prosperity did not happen by accident. American sea power, combined with the dedication of our allies and partners, guaranteed freedom of navigation, maintained peace, and fostered a rules-based order grounded in fairness for all.

America remains a global leader with global interests. Households and businesses throughout the United States benefit from the steady flow of resources and goods across the oceans. Our modern economy depends on access to the internet, which rides upon undersea fiber-optic cables. As we look to the future, our economic and national security will continue to rely upon unrestricted seaborne trade, unimpeded access to markets, and a free and open rules-based order.

AMERICA HAS ALWAYS BEEN A MARITIME NATION. THE SEAS ARE THE LIFELOOD OF OUR ECONOMY, OUR NATIONAL SECURITY, AND OUR WAY OF LIFE.



Today, for the first time in a generation, we face strategic competitors with the demonstrated intent to unravel the free and open order.

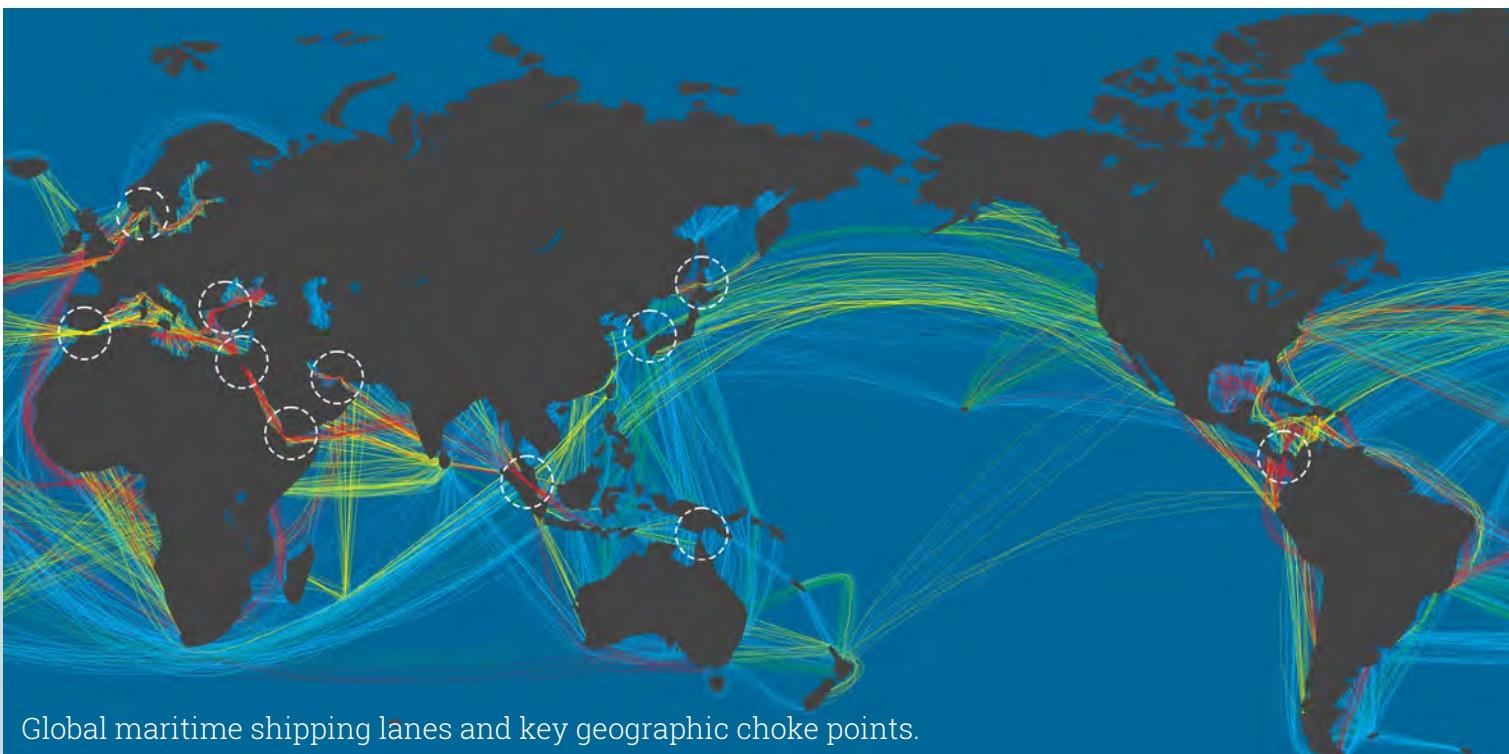
The People's Republic of China (PRC) is building all-domain military capabilities to challenge the United States. Its aggressive behavior is threatening U.S. interests, undermining alliances and partnerships, and undercutting the rules-based system. Russia invaded Ukraine, shattering the post-Cold War peace in Europe and creating new security challenges on that continent and beyond. Meanwhile, the world is entering a new age of warfare, one in which the integration of technology, concepts, partners, and systems—more than fleet size alone—will determine victory in conflict.

Maintaining the world's best Navy is an investment in the security and prosperity of the United States, as well as the stability of our world. Since our Nation's founding, through peace, war, and every challenge in between, the U.S. Navy has stood the watch to protect America's economic vitality, sustain our influence, support our allies and partners, deter conflict, and when called upon, win in combat.

THE U.S. NAVY WILL BUILD, MAINTAIN, TRAIN, AND EQUIP A COMBAT-CREDIBLE, DOMINANT NAVAL FORCE TO KEEP THE SEA LANES OPEN AND FREE, DETER CONFLICT, AND WHEN CALLED UPON, DECISIVELY WIN OUR NATION'S WARS.

This is a critical decade. As global challengers rise to threaten U.S. interests, America must *maintain maritime dominance*.

The U.S. Navy will build, maintain, train, and equip a combat-credible, dominant naval force to keep the sea lanes open and free, deter conflict, and when called upon, decisively win our Nation's wars.



Global maritime shipping lanes and key geographic choke points.

SECURITY ENVIRONMENT

Today, our Navy operates in a battlespace that is quickly growing in lethality and complexity. We face many challenges across the globe, but they largely stem from three significant trends:

- The erosion of credible military deterrence, particularly due to China's rapidly increasing military capabilities.
- Increasingly aggressive Chinese and Russian behavior that undermines the international rules-based order.
- The accelerating pace of technological change and the expanding impact of the information environment.

Over the past three decades, the PRC aggressively leveraged its economic power to grow and modernize its military. China tripled the size of its Navy, expanded its strategic nuclear capacity and capability, advanced its cyber and space capabilities, and constructed a system of sophisticated sensors and long-range precision weapons to intimidate neighbors, challenge free and open access to the seas, and hold U.S. naval forces at risk. These investments in offensive warfighting systems—across all domains—are aimed at the heart of America's *maritime* power. China designs its force for one purpose: to reshape the security environment to its advantage by denying the United States military access to the western Pacific and beyond.

Under the cover of its growing military capabilities, China is conducting a variety of incremental, malign activities, carefully calculated to take place in the *gray zone*—below the threshold of triggering armed conflict. Using a multi-layered fleet of naval ships, maritime militia and coast guard vessels, China is undermining international norms by staking illegal maritime claims, militarizing geographic features in the South and East China Seas, and attempting to intimidate its neighbors out of their offshore resources. This aggressive behavior threatens U.S. interests and destabilizes the rules-based system.

Beyond the Indo-Pacific, additional challenges persist around the globe, demanding continued U.S. maritime strength. Russia remains an acute threat, seeking to fracture NATO and reestablish its sphere of influence through military force, disinformation, and economic pressure. Russia's unprovoked invasion of Ukraine ended the post-Cold War peace on the European continent. Russia also further risks the broader global peace with threats of nuclear escalation, submarine deployments close to American shores, and sophisticated cyber-attacks. At the same time, Iran and North Korea are developing their nuclear and missile programs, and violent extremism remains a dangerous threat.

DECISIVE NAVAL POWER IS ESSENTIAL IN THIS SECURITY ENVIRONMENT; AMERICA CANNOT CEDE THE COMPETITION FOR INFLUENCE. THIS IS A UNIQUELY NAVAL MISSION.

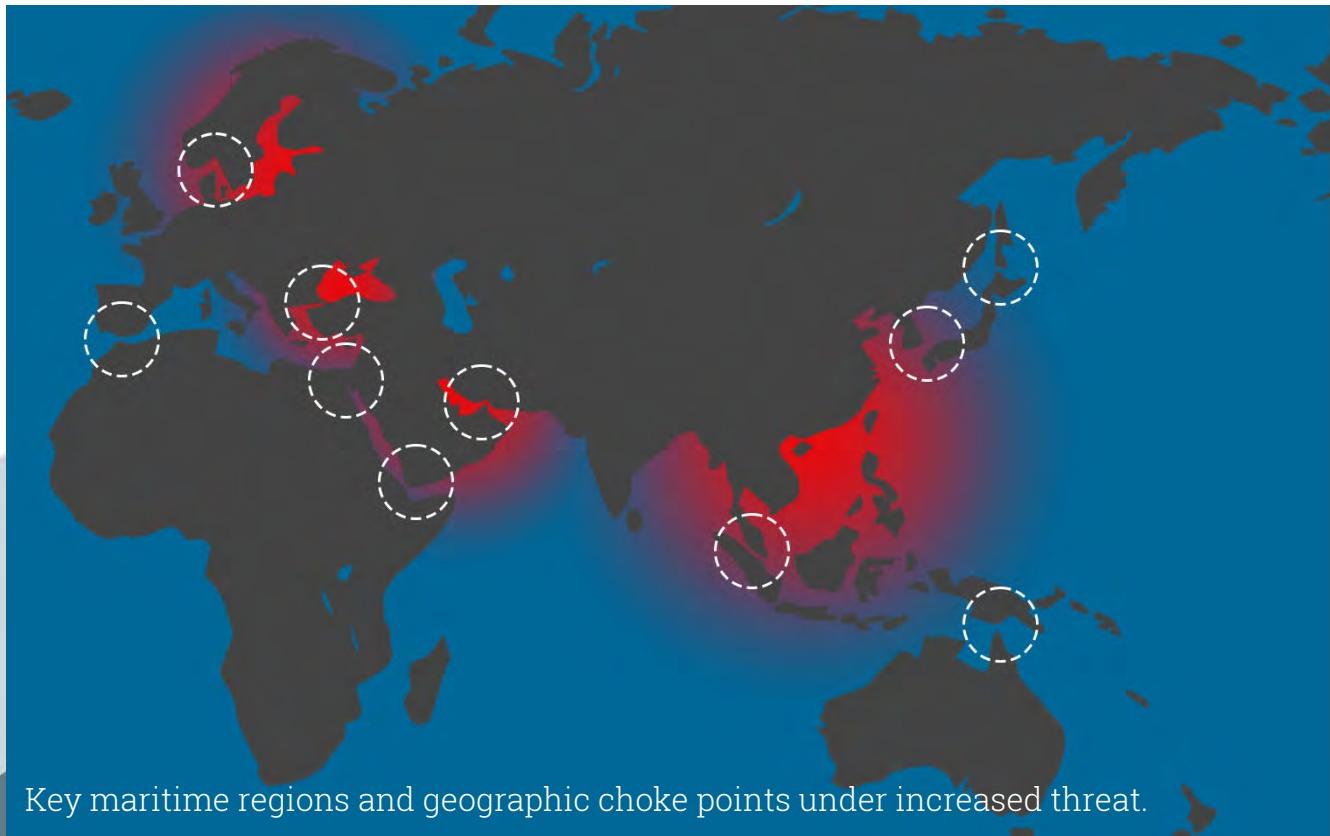
A COMBAT-CREDIBLE U.S. NAVY—FORWARD-DEPLOYED AND INTEGRATED WITH ALL ELEMENTS OF NATIONAL POWER—REMAINS THE NATION'S MOST POTENT, FLEXIBLE, AND VERSATILE INSTRUMENT OF MILITARY INFLUENCE. AS THE UNITED STATES RESPONDS TO THE SECURITY ENVIRONMENT THROUGH INTEGRATED DETERRENCE, OUR NAVY MUST DEPLOY FORWARD AND CAMPAIGN WITH A READY, CAPABLE, COMBAT-CREDIBLE FLEET.

Today's security environment is also characterized by the rapid pace of innovation. Strategic competitors and non-state actors are gaining access to cutting-edge technologies that enable them to threaten American interests and national security. Artificial intelligence, ubiquitous sensors, unmanned systems, and long-range precision weapons are proliferating globally, making contested spaces more transparent and more lethal, and transforming how navies will fight in the future.

ARTIFICIAL INTELLIGENCE, UBIQUITOUS SENSORS, UNMANNED SYSTEMS, AND LONG-RANGE PRECISION WEAPONS ARE PROLIFERATING GLOBALLY, MAKING CONTESTED SPACES MORE TRANSPARENT AND MORE LETHAL, AND TRANSFORMING HOW NAVIES WILL FIGHT IN THE FUTURE.

As the world becomes more interconnected and dependent on the oceans' resources, trans-regional challenges will significantly impact the maritime domain. Climate change threatens coastal nations with rising sea levels and more extreme weather. Melting sea ice opens the Arctic to growing maritime activity and increasing competition. COVID-19 demonstrates how rapidly some threats can become global in scope, generating worldwide political and economic instability. Competition over offshore resources, including protein, energy, and minerals, fuels international tensions. All these trends create vulnerabilities for adversaries to exploit and volatility that can erupt quickly into crisis.

Decisive naval power is essential in this security environment. America cannot cede the competition for influence. *This is a uniquely naval mission.* A combat-credible U.S. Navy—forward-deployed and integrated with all elements of national power—remains our Nation's most potent, flexible, and versatile instrument of military influence. As the United States responds to the security environment through integrated deterrence, our Navy must deploy forward and campaign with a ready, capable, combat-credible fleet.



Key maritime regions and geographic choke points under increased threat.

OUR RESPONSE

Strengthen integrated deterrence. Integrated deterrence is a cornerstone of the 2022 NDS. This concept leverages the Joint Force's combined capabilities in all domains—in concert with our allies, partners, and the entire U.S. Government—to make the costs of aggression against our vital national interests prohibitive.

The ultimate backstop of integrated deterrence is a secure and reliable strategic nuclear deterrent. Our Navy operates and maintains the most survivable leg of the Nation's nuclear triad, representing approximately 70% of America's deployed nuclear arsenal. The Navy will deliver *Columbia*-class submarines on time to replace the retiring *Ohio*-class,

refresh supporting infrastructure, and continue to modernize our nuclear command, control, and communications systems to ensure the United States can deter nuclear coercion and nuclear employment in any scenario.

THE NAVY OPERATES AND MAINTAINS THE MOST SURVIVABLE LEG OF THE NATION'S NUCLEAR TRIAD.

Forward-deployed, combat-credible conventional forces further strengthen integrated deterrence. Employing information warfare, special operations, and a host of weapons launched from all domains, naval forces deploy globally to deter aggression, support diplomacy, and protect American interests across the spectrum of conflict. Operating far from U.S. shores, naval forces also provide the first physical line of U.S. Homeland Defense, preventing potential adversaries from using the oceans to threaten the American homeland. No other element of national power can fulfill this role.

The naval service's ability to control the seas and project power—from both land and sea—has underpinned America's national defense and economic vitality for generations. It is central to integrated deterrence in the future. Sea control provides freedom of maneuver to the Joint Force and our allies while denying it to our enemies in conflict. Our ability to project power deters aggression by convincing rivals they have no viable means of achieving their objectives through force.





Should conflict arise, the Navy/Marine Corps team is consistently positioned forward to fight alongside the Army, Air Force, Space Force, our allies, and our partners to deny enemy objectives, destroy enemy forces, and compel war termination. Naval forces will leverage warfighting concepts—including the Joint Warfighting Concept (JWC), Distributed Maritime Operations (DMO), the concept for Stand-In Forces (SIF), Expeditionary Advanced Basing Operations (EABO), and Littoral Operations in a Contested Environment (LOCE)—to persist forward, prevail in conflict, and end hostilities on favorable U.S. terms.

Campaign Forward. Naval forces provide the United States strategic advantages in position, influence, and flexibility, independent of access to overseas land bases. Our forward posture guarantees our Nation the ability to respond to crisis, blunt gray-zone activities, and preserve a stable and secure global maritime order. The Navy's global maneuverability supports diplomacy, reassures our allies, and generates favorable influence and access in key regions.

Our alliances and partnerships remain our key strategic advantage. Every day, the Navy operates forward alongside allies and partners through combined operations, theater security cooperation, and capacity-building initiatives. These activities *strengthen our strategic partnerships*, increasing interoperability, information sharing, and capacity for resilient, integrated logistics. Working together, we strengthen our ability to prevail in conflict and further bolster integrated deterrence by demonstrating a united front against potential adversaries.

NAVAL FORCES PROVIDE THE UNITED STATES STRATEGIC ADVANTAGES IN POSITION, INFLUENCE, AND FLEXIBILITY, INDEPENDENT OF ACCESS TO OVERSEAS LAND BASES.

The Navy is also uniquely equipped to contest gray-zone incrementalism and malign influence by our adversaries. Many gray-zone activities occur in the global commons—particularly in the maritime domain and cyberspace. Gray-zone aggression thrives on non-attribution. The best way to oppose these activities is to deny our adversaries anonymity with persistent domain awareness, the effective leveraging of intelligence, and the agile application of sea power. Together with whole-of-government partners, the Navy denies the obscurity that our rivals exploit. Contesting, exposing, and attributing malign behavior imposes reputational costs, diminishes the effectiveness of propaganda, and galvanizes international resistance.

Build enduring warfighting advantages. To maintain our advantage at sea, America needs a larger and more capable Navy. Faced with peer competitors and emerging disruptive technologies, the Navy needs to become more agile in developing and delivering our future force. Above all, our naval forces must be *combat credible*—measured by our ability to deliver lethal effects in contested and persistently surveilled battlespaces.

FORCE DESIGN IMPERATIVES

In close collaboration with the other Armed Services, the Navy has prioritized the future capabilities we need to employ our warfighting concepts and maintain credible deterrence. As we build the future force, we can group these capabilities into **six** overarching ***Force Design Imperatives***.

Expand ***Distance***: Long-range precision fires across all domains and platforms with greater reach enable naval forces to strike hostile targets while increasing our own survivability.

Leverage ***Deception***: Deceptive measures—including stealth, concealment and maneuver, emissions control, and electronic warfare—degrade enemy surveillance and increase adversary uncertainty, enabling naval forces to operate effectively in contested battlespaces.

Harden ***Defense***: Integrating directed energy with hard-kill and soft-kill defensive systems disrupts attacks and keeps naval forces survivable when targeted by adversaries.

Increase ***Distribution***: Distributing forces geographically and in all domains enables them to threaten an adversary from multiple attack axes. Smaller, lethal, and less costly platforms—including manned, unmanned, and optionally-manned—further complicate threat targeting, generate confusion, and impose dilemmas for our adversaries.

Ensure ***Delivery***: Resilient logistics connecting the foundry to the fleet—enabled by secure communications and information technology—refuel, rearm, resupply, repair, and revive distributed naval forces down to the last tactical mile.

Generate ***Decision Advantage***: Naval forces will out-sense, out-decide, and out-fight any adversary by accelerating our decision cycles with secure, survivable, and cyber-resilient networks, accurate data, and artificial intelligence. Connecting sensors, weapons, and decision-makers across all domains enables naval forces to mass firepower and influence without massing forces.

Together, these six force design imperatives enable DMO, the Navy's foundational operating concept. Our priority investments are delivering on these imperatives. For example:

- Investments in hypersonic weapons, space-based capabilities, unmanned tanking, and long-range precision fires deliver capabilities for effects at an expanded ***distance***.
- Investments in undersea platforms, weapons, and systems, next-generation aircraft and surface platforms, cyber capabilities, counter-surveillance, and integrated weapons systems deliver increased ***deception*** and ***defense***.
- Investments in smaller, lethal platforms, autonomous systems in all domains, artificial intelligence, resilient logistics, and integrated combat systems and networks enable a more ***distributed*** fleet, the ***delivery*** to sustain it, and expand our ***decision advantage***.



Our adversaries are investing heavily in emerging technologies. In response, the Navy will adopt a more agile approach to experimentation and force modernization, leveraging partnerships with industry and academia. We will promote a culture that embraces new concepts and prioritizes critical areas for investment, while also preparing to rapidly adapt—fast follow—in others. Working closely with allies and partners, we will expand our partnerships across the entire technology ecosystem. We will include Sailors early in the development process, listen to their ideas, and drive healthy feedback loops with the industrial and innovation base.

FORCE DESIGN IMPERATIVES

1. DISTANCE
2. DECEPTION
3. DEFENSE
4. DISTRIBUTION
5. DELIVERY
6. DECISION ADVANTAGE

FORCE DESIGN 2045

Force design defines the surface, subsurface, and aviation platform types—paired with the right concepts, capabilities, information systems, and networks—to meet the Navy's national defense commitments in a rapidly evolving strategic environment. This complements the Navy's 30-year shipbuilding plan and Force Structure Assessments with a long-term strategic vision that leverages organizational learning across the Navy, including war-gaming, analysis, and research and development into emerging technologies. Strategic competition with China is both a current and long-term challenge. Focusing our force design on 2045 will inform the most consequential decisions and investments the Navy needs to make in the critical decade ahead.

Past and ongoing threat-informed analysis, both inside and outside the Department of Defense, underscores the need for a more capable, larger Navy. The Navy must set a sustainable trajectory *now* to ensure we remain the combat-credible maritime force our Nation needs in the future. **Retiring legacy platforms that cannot stay relevant in contested seas—and investing in the capabilities we need for the future—is essential for our national security.**

The Navy's force design reinforces the need to shift to a larger, more capable, more distributed fleet to support NDS and JWC priorities:

- The Navy must **defend** the Homeland with an assured nuclear deterrent from beneath the sea to deter nuclear and non-nuclear strategic attacks.
- The Navy must be capable of controlling the seas to **deter** aggression against our allies and partners, and project power ashore as an integral part of the Joint Force.
- The Navy will incorporate our force design imperatives—distance, deception, defense, distribution, delivery, and decision advantage—to effectively integrate with the Joint Force, deliver effects across all domains, and **defeat** adversary forces in conflict.

To accomplish this, the Navy must become a hybrid fleet. Manned, multi-mission platforms will remain at the core of our future fleet, but augmented with new platforms and new capabilities. We will add to our current fleet a host of manned, unmanned and optionally-manned platforms operating under, on, and above the seas. This future fleet will deliver an assured strategic deterrent; greater numbers of undersea capabilities; a mix of large and small modern surface combatants; and a resilient logistics enterprise that can sustain our distributed naval force.

FORCE DESIGN 2045 (CONTINUED)

This hybrid fleet will support the Joint Force with responsive options in competition, crisis, and conflict against rapidly evolving peer competitors. In the 2040s and beyond, we envision this hybrid fleet to require more than 350 manned ships, about 150 large unmanned surface and subsurface platforms, and approximately 3,000 aircraft. As the security environment evolves, we will continue to iteratively refine our capacity goals through force structure assessments, analysis, war-gaming, and experimentation to ensure the most capable, cost-effective future force possible. We forecast the future fleet to consist of:

- *Columbia*-class ballistic missile submarines to provide America with an assured deterrent to any strategic attack on the Homeland. (Capacity goal: 12)
- Nuclear-powered aircraft carriers, which will remain the most survivable and versatile airfields in the world, to provide long-range, persistent sea control, power projection, and organic sensing in contested seas, as well as flexible options across the spectrum of conflict. (Capacity goal: 12)
- Nuclear-powered fast-attack and large payload submarines to hold adversaries at risk in both contested seas and open oceans. We will continue to build the *Virginia*-class at a sustainable rate while developing the SSN(X). (Capacity goal: 66)
- Large and small surface combatants to sustain free and open seas, including DDG(X) next-generation guided-missile destroyers and *Constellation*-class frigates, capable of defending the fleet, striking adversary forces in all domains, and expanding interoperability with allies and partners. (Capacity goal: 96 Large and 56 Small)
- Amphibious ships, including a core of amphibious assault ships to support Marine Expeditionary Units, and light expeditionary ships to provide maritime maneuver for Marine Littoral Regiments. (Capacity goal: 31 amphibious assault and 18 Light Amphibious Warships)
- Unmanned surface and subsurface platforms to increase the fleet's capacity for distribution; expand our intelligence, surveillance, and reconnaissance advantage; add depth to our missile magazines; supplement logistics; and enhance fleet survivability. This transition will rebalance the fleet away from exquisite, manpower-intensive platforms toward smaller, less-expensive, yet lethal ones. (Capacity goal: Approximately 150)
- Combat logistics ships and auxiliary vessels to include replenishment ships, submarine and unmanned platform tenders, repair ships, salvage ships, and hospital ships. The combat logistics force, including the next-generation logistics ships, will be sized to ensure the appropriate capacity to refuel, rearm, and resupply a maneuvering, distributed fleet at sea. (Capacity goal: 82)
- Expeditionary logistics in sufficient capacity to provide in-theater sustainment capabilities to a distributed expeditionary shore infrastructure, including forward damage repair, mobile construction, cargo handling, and medical services.
- Flexible, long-range, and lethal carrier-based aircraft, consisting of a mix of 5th Generation manned aircraft and Next Generation Air Dominance Family of Systems. (Capacity goal: Approximately 1,300)

- Aircraft for anti-submarine and anti-surface warfare, to include helicopters and maritime patrol and reconnaissance aircraft, all augmented by unmanned aviation systems. (Capacity goal: Approximately 900)
- Support aircraft, including intra-theater lift, training, and research and development. (Capacity goal: Approximately 750)
- Information Warfare capabilities to counter adversary forces, complete kill chains, connect fleet platforms, and persistently cover the battlespace to ensure decision advantage.
- We will augment the force with an evolving complement of thousands of small, rapidly adaptable, and attritable unmanned platforms. These enablers will increase our sensing resilience, persistence, and coverage, provide cross-domain kinetic and non-kinetic effects, and enhance the survivability and sustainability of the future fleet.

We will build future platforms with modernization in mind—hardware upgradeable and software updateable at the speed of innovation. We must build adequate space, weight, and power into our large long-life capital investments to support evolving sensors and weapons systems. This agility will keep our forces combat credible, resiliently networked, increasingly autonomous, and adaptable to evolving threats—making them more capable on their last day of service than on their first. They will seamlessly operate with the Joint Force, support Marines in contested areas, and will be complemented by the Coast Guard to generate integrated all-domain naval power. They will also be interoperable with our allies and partners to address threats to our collective security.

**WE WILL BUILD FUTURE PLATFORMS WITH
MODERNIZATION IN MIND—HARDWARE
UPGRADEABLE AND SOFTWARE UPDATEABLE
AT THE SPEED OF INNOVATION.**

The Navy will better leverage the full potential of its academic, analytic, intelligence, research, development, and war-gaming enterprises to optimize our future Total Force. To ensure our Force Design guidance is focused, iterative, and informs Navy budget decisions, the Deputy Chief of Naval Operations for Warfighting Development (OPNAV N7) will be the supported commander for developing and maintaining the Navy's Force Design vision.



NAVIGATION PLAN PRIORITIES

The Navy's unique roles and responsibilities require a larger, more ready, more capable, and more lethal fleet. To deliver that fleet today, tomorrow, and in the future, we will continue to focus on four priorities: **Readiness, Capabilities, Capacity, and our Sailors.**

- Prioritize **readiness** to keep combat-ready forces forward to deter conflict and protect the free and open system underpinning American security and prosperity.
- Modernize **capabilities** to credibly deter war and, if necessary, win in conflict. Platforms that are ineffective or overly vulnerable in contested environments are decreasingly relevant to the future fight.
- Generate cost-effective **capacity** to achieve warfighting advantage with acceptable risk, bolstered by unmanned technologies, operational concepts, and the strategic depth of our reserve component.
- Invest in trained, resilient, and educated **Sailors** that can out-think, out-decide, and out-fight any potential adversary.

WE MUST DELIVER A NAVY DESIGNED TO DETER CONFLICT AND HELP WIN OUR NATION'S WARS AS WE MAINTAIN A GLOBAL POSTURE TO ASSURE OUR PROSPERITY. OUR NATIONAL SECURITY DEPENDS ON IT.

Our strategic nuclear deterrent, our century-old dry dock and ship repair facilities, and our strategic sealift capacity. **To simultaneously modernize and grow the capacity of our fleet, the Navy will require 3-5% sustained budget growth above actual inflation. Short of that, we will prioritize modernization over preserving force structure.** This will decrease the size of the fleet until we can deploy smaller, more cost-effective, and more autonomous force packages at scale.

The Nation cannot afford to cede influence to China or Russia. Nor can it afford to lose combat credibility. We must deliver a Navy designed to deter conflict and help win our Nation's wars as we maintain a global posture to assure our prosperity. Our national security depends on it.





ACHIEVING NAVIGATION PLAN PRIORITIES

GET REAL, GET BETTER

Building enduring advantages in a complex, rapidly changing threat environment demands a warfighting culture focused on continuous improvement. Our Navy team is the most capable in the world. However, over years of study, we have identified pockets of unacceptable variability in our performance; the gap between our best and worst performers is too great. To address this, we must standardize and incentivize Navy-proven best practice leadership behaviors and problem-solving throughout the force to reduce this variability and unleash our full potential. This is a foundational movement based upon an environment of inclusion, transparency, and honest assessment. In simple terms, this is our **Get Real, Get Better** call to action.

Get Real requires Navy leaders to ruthlessly *self-assess*; be honest, humble, and transparent about their capabilities and limitations; challenge their beliefs using data, facts, and diverse input; and “embrace the red”—acknowledge shortcomings—by being curious and taking pride in finding and fixing problems.

Get Better requires Navy leaders to deliberately *self-correct*, find and fix small problems before they become larger, systemic issues; fix the root causes, not just symptoms; apply critical problem-solving tools and best practices to shift from more activity to better outcomes; set clear accountability; work collaboratively; and quickly identify and remove barriers to progress, elevating problems to higher leadership, if necessary.

A *learning mindset* is essential. Get Real, Get Better requires Navy leaders to share what they learn to help make others more successful; to be courageous and aim high even if it means initially falling short; to build trust among their teams; to recognize and reward those who adopt Get Real, Get Better principles; and to experiment frequently to find better solutions, adjusting plans based on learning.

The **Charge of Command** reflects this new set of expectations for our commanding officers to be more self-assessing and self-correcting. It is a clear statement of what the Navy values in our leaders and what we expect our teams to embody to win the future fight.

Get Real, Get Better leadership behaviors, tools, and systems are the key to *empowering our people* and accelerating our warfighting advantage. We will adjust our leadership education and training to incorporate these principles as fundamental to how we develop our Sailors and build our teams. We will also reform our talent management systems to incentivize Get Real, Get Better behaviors, rewarding leaders for the outcomes they achieve and the culture they create.

**BUILDING ENDURING ADVANTAGES IN A COMPLEX, RAPIDLY CHANGING
THREAT ENVIRONMENT DEMANDS A WARFIGHTING CULTURE
FOCUSED ON CONTINUOUS IMPROVEMENT.**

ACHIEVING NAVIGATION PLAN PRIORITIES

NAVIGATION PLAN IMPLEMENTATION FRAMEWORK

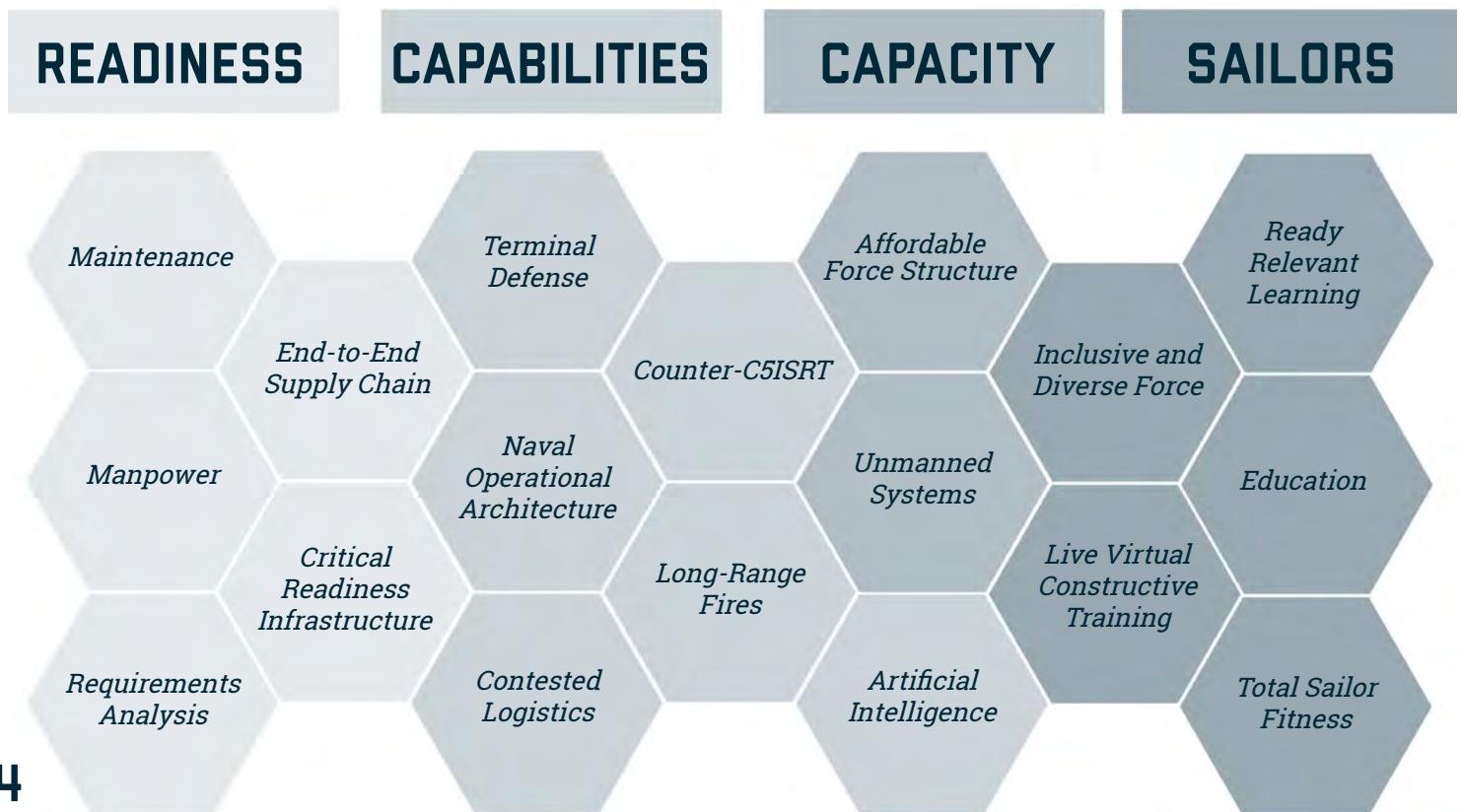
The U.S. Navy has built a framework for strengthening our Readiness, Capabilities, Capacity, and Sailors to deliver the most capable force possible to our Numbered Fleets. This is the **Navigation Plan Implementation Framework (NIF)**, which enables the Navy to employ powerful problem solving methods across 18 coordinated objectives. Each objective is assigned a supported commander, accountable for collaborating with supporting commanders, to accelerate progress and deliver the outcomes the Navy needs for the future.

Over the past year, the NIF's collaborative, holistic approach broke through traditional stovepipes and turned priorities into tangible action. The NIF provides structure, focus, and alignment across the Navy to inform our budget, institutionalize our goals, and sustain our efforts.

In support of our Force Design Imperatives, we have prioritized four Capability objectives for alignment, integration, and acceleration: Long-range Fires (how we shoot), Counter-C5ISRT (how we maneuver), Terminal Defense (how we defend), and Contested Logistics (how we resupply). These NIF Capability efforts are critical to delivering a fleet that can win decisively against a near-peer adversary. Supporting these NIF objectives are four enabling objectives: Live, Virtual and Constructive Training; Naval Operational Architecture; Artificial Intelligence, and Unmanned Systems. This '4+4' central effort allows supported commanders of the NIF to work cross-functionally to deliver optimal warfighting advantage in the near term.

The following sections discuss our progress in advancing all 18 NIF objectives, what we have learned, and where these continued efforts are going next.

NAVIGATION PLAN PRIORITIES AND OBJECTIVES





READINESS

Readiness remains the Navy's top priority. Today's security environment demands ships, aircraft, submarines, expeditionary forces, special operations forces, and Sailors that are ready to fight and win. Readiness is generated across the Navy, from our shipyards and aviation depots, to our global network of bases and stations, to the steaming and flying hours our Sailors need to hone their skills. We measure the expected service lives of our platforms in decades, not years; supporting our Sailors with fully manned, maintained, and sustained platforms throughout their expected service lives is critical for credible deterrence. We will not field a hollow fleet that cannot provide for the Nation's defense.

READINESS REMAINS THE NAVY'S TOP PRIORITY.

OUR PROGRESS

- Maintained over the threshold Mission Capable Rate for most Type-Model-Series Aircraft, including the F/A-18E/F, E/A-18G, E-2D, P-8A, MH-60R, and MH-60S.
- Reduced maintenance delay days on regular CNO availabilities in our private shipyards by 58% since 2019.
- Continued work to reduce overall gaps at sea while adding additional manpower to reach full validated work requirements.
- Improved repair turnaround time and parts reliability in the supply chain, realizing millions of dollars in savings to reinvest and deliver critical parts to the fleet faster.



WHAT WE HAVE LEARNED

- Performance-to-Plan (P2P) remains the key driver to Get Real on our baseline readiness performance, identify the most consequential levers that move the needle on outcomes, and communicate performance barriers to accountable supported commanders.
- The Naval Sustainment System (NSS), our Get Better engine, brings world-class solutions and best practices to improve readiness outcomes.
- Improving on-time completion in our public shipyards remains a challenge. While we have improved our ability to predict repair time for our submarines and aircraft carriers, further progress requires implementing the right shipyard production controls to make the artisan the center of all shipyard efforts.
- We are taking a holistic, analytical approach to our critical shore infrastructure, making necessary once-in-a-century investments to overhaul our Nation's shipyards through the Shipyard Infrastructure Optimization Plan (SIOP), ensuring our footprint ashore can support fleet operations.

WHERE WE ARE GOING

- **Ship/Submarine/Aviation Maintenance:** Continue to drive maintenance delays down to zero. Work with naval shipyards and industry partners to improve performance. Accelerate gains made in aviation readiness to reinvest in other areas of the Naval Aviation Enterprise.

Supported Commander: Deputy CNO for Integration of Capabilities and Resources (OPNAV N8)

- **Manpower:** Continue to close manning gaps at sea through more robust recruitment, retention, and continuum of service opportunities. Focus on flexible, streamlined, and responsive community and career management with reduced friction points. Evaluate expanding personnel readiness metrics to include the experience and proficiency of Sailors to determine whether units are getting the right fit of personnel.

Supported Commander: Deputy CNO for Manpower, Personnel, Training, and Education/Chief of Naval Personnel (OPNAV NI)

- **End-to-End Supply Chain:** Through better use of data, improve the resilience and responsiveness of the Navy Supply System by improving parts reliability, allowance, time in transit, and wholesale procurement.

Supported Commander: Deputy CNO for Fleet Readiness and Logistics (OPNAV N4)

- **Critical Readiness Infrastructure:** Enable critical fleet operations by more accurately understanding the costs and impact of infrastructure requirements through data analytics.

Supported Commander: Deputy CNO for Fleet Readiness and Logistics (OPNAV N4)

- **Requirements Analysis:** Through the Analytic Master Plan, develop an aligned, cohesive, and data-enabled vision of future warfighting and readiness requirements to improve our combat readiness with rigorous research and analysis.

Supported Commander: Deputy CNO for Warfighting Development (OPNAV N7)



CAPABILITIES

We will modernize the fleet for the full spectrum of conflict by delivering capabilities that can achieve lethal and persistent effects inside adversary weapon engagement zones, generate advantages to create off-ramps in crisis, and decisively win should crisis escalate into conflict. Developing and strengthening interoperability with allies and partners will be fundamental to our success.



OUR PROGRESS

- Completed first F-35C and CMV-22B Carrier Strike Group deployment.
- Achieved key milestones in delivering Naval Operational Architecture (NOA) Increment 1, connecting platforms, weapons, and sensors in support of DMO.
- Accomplished Conventional Prompt Strike (CPS) testing and tech development, including milestones in rocket motor testing.
- Aligned NIF objectives to inform budget decision-making.
- Intercepted and destroyed a threat-representative Intercontinental Ballistic Missile (ICBM) during a flight test demonstration of a weapon co-developed with allies.

WHAT WE HAVE LEARNED

- Modern naval warfare requires integrated systems to manage the information necessary to generate decision advantage, close complex kill chains, and logistically sustain a distributed, forward-deployed force. We must design every platform, weapon system, and support facility with this in mind.
- To build the dynamic kill chains required for DMO, we must modernize and integrate current capabilities for Long Range Fires, aligning our analysis, prototyping, experimentation, requirements documentation, and capability development.
- Terminal Defense is maturing from a constellation of kinetic, Directed Energy (DE) and Electronic Warfare (EW) weaponry to a Hard-Kill, Soft-Kill, and DE system-of-systems that is fully integrated with our platforms and the future Integrated Combat System.
- Through the NIF, in conjunction with fleet priorities, we are bringing clarity and cohesiveness to our warfighting requirements within the budget process and in operational planning.



WHERE WE ARE GOING

- **Terminal Defense:** Pursue a fully-integrated combat capability that employs lethal and sustainable effects to defend naval forces against complex raid scenarios.

Supported Commander: Deputy CNO for Warfighting Requirements and Capabilities (OPNAV N9)

WE WILL MODERNIZE
CAPABILITIES TO CREDIBLY
DETER WAR AND, IF
NECESSARY, WIN IN CONFLICT

- **Naval Operational Architecture:** Remain on schedule to operationally test the NOA Increment 1 in 2023 within a Carrier Strike Group, working closely with international partners and Joint Force companion efforts to build cyber-secure information technology.

Supported Commander: Commander, Naval Information Systems Warfare Command (NAWWAR)

- **Contested Logistics:** Recapitalize our logistics fleet through used sealift buys in 2022, achieving T-AO 205 Initial Operational Capability by 2023, delivering Next-Generation Logistics Ship by 2030, and recapitalizing C-130s by 2030. Continue war-gaming and experimentation to inform how a survivable Navy logistics construct supports the sustainment of military operations in a contested environment.

Supported Commander: Deputy CNO for Fleet Readiness and Logistics (OPNAV N4)

- **Counter-C5ISR:** Continue to develop capabilities that support naval units operating inside adversary weapons engagement zones, focusing on full-spectrum sensing and signature management.

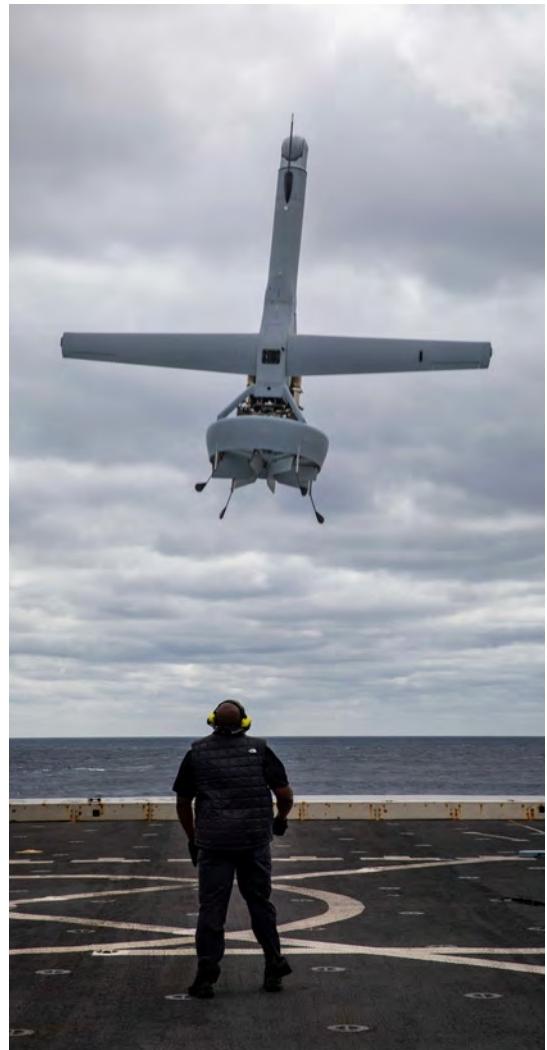
Supported Commander: Deputy CNO for Information Warfare/Director of Naval Intelligence (OPNAV N2/N6)

- **Long Range Fires:** Develop and integrate joint, all-domain capabilities to project power at increasing ranges through contested maritime environments. Pursue a mix of weapons with required enablers, including CPS development and all-up-round testing.

Supported Commander: Deputy CNO for Warfighting Requirements and Capabilities (OPNAV N9)

- **Artificial Intelligence (AI):** Leverage AI to support other elements of the Capability NIF, including both warfighting and corporate applications. By 2023, launch a framework to identify gaps and accelerate delivery of AI-enabled capabilities to the Fleet and Navy enterprises.

Supported Commander: Chief of Naval Research (CNR)



CAPACITY

The Navy will build a combat-credible, hybrid fleet to ensure our Nation's success across the continuum of day-to-day competition, crisis, and conflict. The future fleet will be capable of distributing and delivering larger volumes of kinetic and non-kinetic effects across all domains to meet the strategic and operational demands of the Joint Force. We

**THE NAVY WILL BUILD A COMBAT-CREDIBLE,
HYBRID FLEET TO ENSURE OUR NATION'S
SUCCESS ACROSS THE CONTINUUM OF DAY-TO-
DAY COMPETITION, CRISIS, AND CONFLICT.**

must deliver the *Columbia*-class program on time; expand our undersea advantage; develop a resilient logistics enterprise; and field a host of manned, unmanned, and optionally-manned platforms—under, on, and above the sea.

OUR PROGRESS

- Released the Unmanned Campaign Plan (UCP) Framework.
- Established the Unmanned Task Force (UTF), a cross-functional team focusing on rapid experimentation and solving operational problems.
- Established Task Force 59 (CTF-59) to accelerate unmanned and AI solutions, demonstrating the importance of partnering warfighters with industry in operational experimentation with available technologies.
- Following Integrated Unmanned Battle Problem 21, conducted a series of analytical sprints to identify opportunities and better inform recommendations on what to accelerate or reprioritize.
- Completed over 4,000 hours and 46,000 nautical miles of USV operations.
- Completed MQ-25A in-flight refueling of Navy carrier-based aircraft and completed the first aircraft carrier demonstration of the platform.
- Continued work with allies and partners in events such as NATO Maritime Unmanned Systems Initiative Exercises and International Maritime Exercise 2022.

WHAT WE HAVE LEARNED

- The traditional, platform-centric approach to developing new capabilities is, by itself, insufficient to support the force design we need in this critical decade.
- Taking a “limiting factor” approach to technology maturity will help us make optimal investment decisions about the types of unmanned investments we should make.
- Speed is a factor, driven by transparency and knowledge sharing.

WHERE WE ARE GOING

- **Unmanned Systems:** Accelerate innovation efforts by aligning the acquisition, requirements, financial management, and operational communities supporting unmanned technology. Strengthen a culture of accountability and measurable progress. Focus on adopting enabling technologies that both provide near-term capability and help lay the foundation for the future hybrid fleet.

THE FUTURE FLEET WILL BE CAPABLE OF DISTRIBUTING AND DELIVERING LARGER VOLUMES OF KINETIC AND NON-KINETIC EFFECTS ACROSS ALL DOMAINS TO MEET THE STRATEGIC AND OPERATIONAL DEMANDS OF THE JOINT FORCE.

Supported Commander: Deputy CNO for Warfighting Requirements and Capabilities (OPNAV N9)

- **Affordable Force Structure:** Improve budget, requirements, and acquisition processes with a cost estimating dashboard to better project risk in cost, schedule, and performance.

Supported Commander: Deputy CNO for Integration of Capabilities and Resources (OPNAV N8)



SAILORS

The Navy's enduring asymmetric advantage is our workforce—both uniformed and civilian—across our active and reserve components. We owe it to our people to create an ecosystem that recruits and retains diverse and technically skilled personnel, educates them to out-think our adversaries, trains them to work with new technologies, and provides them with the resources to prevail in competition, crisis, and conflict.



OUR PROGRESS

- Leveraged Large Scale Exercise-21 and other fleet exercises to connect eight Maritime Operations Centers, three Marine Force Operations Centers, eight Carrier and Expeditionary Strike Groups, and 30 ships into a single Live Virtual Constructive (LVC) training environment.
- Updated 11 enlisted ratings from legacy instructional methods—and are updating another 26—to incorporate immersive and interactive technology, improving learner experience and skill attainment.
- Completed a top-down review of the education needs of the future force, establishing key warfighting competencies that will guide future education development.
- Launched 48 Task Force One Navy initiatives, which remain on track for full implementation, with further Navy Diversity, Equity, and Inclusion efforts underway.

WHAT WE HAVE LEARNED

- Progress toward a more diverse, inclusive, equitable, and stronger Navy is difficult and requires sustained commitment. Given how diverse each community is within the Navy, tailored approaches are more successful than one-size-fits-all, prescriptive measures. We are developing a Navy methodology to measure diversity of representation and equity of opportunity to make progress toward essential Diversity, Equity, and Inclusion goals across the Total Force.
- We holistically evaluated Navy efforts focused on building a stronger, tougher, and more resilient Navy. We found that we risk creating gaps in supporting the physical, psychological, spiritual, and social needs of our force without an integrated framework focusing on optimizing the performance of our Sailors. We will better align this constellation of programs so that Sailors, with the support of their commands, can reach their optimal potential.

**THE NAVY'S ENDURING ASYMMETRIC
ADVANTAGE IS OUR WORKFORCE—BOTH
UNIFORMED AND CIVILIAN—ACROSS OUR
ACTIVE AND RESERVE COMPONENTS.**

- The Navy Leader Development Framework remains the linchpin for assessing these goals in order to develop leaders who demonstrate operational excellence, strong character, diverse perspectives, and resilience through our different communities at every level of seniority. Through this structure, community leads will share ideas and advocate for talent management reforms that unleash the power of our people.
- The Ready, Relevant Learning (RRL) initiative continues to modernize Navy training and accelerate new delivery methods, supplementing our traditional brick-and-mortar schoolhouses with modern, multi-media, multi-platform solutions. In addition, RRL will develop Career-Long Learning Continuums for Navy ratings to map out technical, professional, and leadership training requirements for apprentice, journeyman, and master level milestones in a Sailor's career.
- LVC training continues to be a game-changer in training our combat leaders in the Fleet. From the Fleet Commander, to the pilot in the cockpit, to the First Class Petty Officer on the radar scope, LVC allows us to train together in one environment at unprecedented levels of integration and complexity.

WHERE WE ARE GOING

- **Inclusive and Diverse Force:** Through the Navy Leader Development Framework, continue to measure the results of initiatives to ensure the Navy is becoming a more diverse, inclusive, and equitable force, making stronger teams and stronger warfighters.

Supported Commander: Deputy CNO for Manpower, Personnel, Training, and Education/Chief of Naval Personnel (OPNAV N1)

- **Live Virtual Constructive Training:** Through unit, strike group, joint, and large-scale exercises, continue to invest in and test LVC to ensure it meets fleet training needs.

Supported Commander: Deputy CNO for Warfighting Requirements and Capabilities (OPNAV N9)

- **Ready, Relevant Learning:** Convert four additional Sailor ratings to modernized delivery models in 2022, begin the process for an additional six ratings, and complete development for 14 Career-Long Learning Continuums.

Supported Commander: U.S. Fleet Forces Command (USFF)

- **Education:** By the end of the decade, align talent management, professional military education, and Navy research to advance warfighting competencies.

Supported Commander: Deputy CNO for Warfighting Development (OPNAV N7)

- **Total Sailor Fitness:** Implement a holistic and prevention-based Total Sailor Fitness framework to maximize Sailor performance and set the conditions for optimal unit performance while driving progress in Sailor trust, toughness, mental health, connectedness, and positive behavior.

Supported Commander: U.S. Fleet Forces Command (USFF)

CONCLUSION

Sea power forged our nation. For generations, a strong Navy has ensured American influence across the world, expanded economic opportunities for the American people, and guaranteed the rules-based order underpinning global security and prosperity. Today, this security and prosperity is under threat.

The U.S. Navy embraces our position on the world stage as a partner of choice, a partner to be emulated and trusted, and a partner fully capable of credibly deterring our adversaries. We must move decisively to modernize U.S. naval power, while maintaining readiness and sustaining a forward posture that keeps America and our allies safe and prosperous.

Capable ships, submarines, and aircraft are no doubt expensive instruments of national power, as are the costs of maintaining them. But history shows that without a ready, powerful Navy, the price tag is much higher. By delivering a modern, capable, integrated, and increasingly hybrid fleet—on, above, and below the seas—we will prevail across the continuum of day-to-day competition, crisis, and conflict. The investments we make now will shape the maritime balance of power for the rest of this century.

This is an important voyage. The Navy is committed to accelerating America's advantage at sea. Every one of us has an important role to play and our success depends on executing this Navigation Plan as a team. Together, we must deliver the naval power America needs.



M.M. Gilday
Admiral, U.S. Navy
Chief of Naval Operations







**CHIEF OF NAVAL OPERATIONS
NAVIGATION PLAN
2022**